

Happenings

*at the Science Advisory Board
....insuring a solid basis for environmental protection*

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1. Editorial:

SAB MEMBERSHIP: FY97 & FY98

In mid-March, Deputy Administrator Fred Hansen announced the appointments for membership on the Science Advisory Board for FY97. A special edition of "HAPPENINGS at the SAB" conveyed this information to our readership.

The Board has been fortunate in enlisting top scientific, engineering, and economic talent to join in its efforts to provide sound advice to the Agency on the technical aspects of the issue of environmental protection and public health. The questions faced by Board Members are often difficult; the work is often demanding; and tangible rewards are few. However, the Members often point to the personal satisfaction of doing an important job well in the company of talented professionals, as their main motivation for serving.

Some people ask, "Where do SAB members come from?" One way to answer that question can be found in the data below:

	AFFILIATION	GENDER	MINORITIES
ACADEMIC	48 (49%)	WOMEN 30 (31%)	11 (11%)
CONSULTANT	14 (14%)	MEN 67 (69%)	
ENVIRONMENTAL	4 (4%)		
INDUSTRY	7 (7%)		
RESEARCH INST	15 (15%)		
STATE	<u>9 (9%)</u>		
	97 100%		

Another way to answer the question is "In response to solicitation, such as announcements in the Federal Register." Still another answer is "Through nomination by a third party."

The process of finding candidates for SAB in FY98 has already begun. For example, the Federal Register of March 18, 1997, (62 FR12829) contained a general solicitation to the public. In addition, Offices within the Agency have been asked to submit names of candidates. Also, the SAB Staff are talking with current SAB members, interested organizations, and others about submitting names.

Our readers are welcome to join in this effort to find the most appropriate group of experienced, technical experts to help the Agency examine the scientific basis of EPA positions. Sound regulations are built on a sound foundation of sound science.

To submit a nomination for SAB membership, please refer to the Federal Register notice referenced above (also available on the SAB Website [<http://www.epa.gov/sciencel>]). Simply submit a

resume of the candidate, together with a suggestion as to the most appropriate SAB Committee(s) in light of the person's background and experience.

The intent is to move the process forward with sufficient integrity and speed that the announcements on SAB Membership for FY98 will appear in October, 1997.

Donald G. Barnes, PhD
Staff Director
Science Advisory Board

2. TENTATIVE CALENDAR FOR APRIL AND MAY

Several of the FACA meetings below have been announced in the Federal Register (FR), together with additional background information. Readers can automatically receive emailed copies of FR Notices by subscribing to the SAB Listserver; see Section 5.c.(2) below.

If a series of meetings is anticipated, the number of the meeting in the series is indicated in parentheses; e.g., "(#2)"

If a meeting is to be conducted via publicly accessible conference call, the date is enclosed in brackets: "[.....]"

A glossary of acronyms appears at the end of the list of March meetings.

APRIL

Apr 2-4 IRP: Valuation Subcommittee (#3) IRP/VS Baltimore
A workshop with several consultants to explore
alternatives for valuing benefits and resources
VS Co-Chair: Dr. Al Maki, Exxon Corp

Dr. Milton Russell, Univ of TN

DFO: Tom Miller

[Apr 17] Environmental Goals EC/Sub [Tele]
Chair: Dr. Genevieve Matanoski, Johns Hopkins Univ
DFO: Jack Fowle

Apr 21-23 IRP: Steering Committee (#5) IRP/SC DC
The group will further develop the form and
substance of the final report

Chair: Dr. Genevieve Matanoski, Johns Hopkins

DFO: Stephanie Sanzone

Apr 24-25 Quarterly meeting EC DC

Chair: Dr. Genevieve Matanoski, Johns Hopkins Univ

DFO: Don Barnes

Apr 29 OCEA SFIP & OSWER Groundwater Filtering EEC/Sub DC
 Policy
 Chair: Dr. Ishwar Murarka, EPRI
 DFO: Kathleen Conway

Apr 30-May 1 Surface Impoundment Survey EEC/Sub DC
 Chair: Dr. Lynne Preslo, Earth Technology
 DFO: Kathleen Conway

[Apr TBA] Air Quality Models for COUNCIL/Sub [Tele]
 Section 812 Study
 Chair: Dr. Paulette Middleton, Sci & Policy
 Associates
 DFO: Jack Kooyoomjian

[May TBA] Advisory on the Review of the Statistical DWC [Tele]
 Protocol for the Microbiological Survey
 of Drinking Water
 DWC Chair: Dr. Richard Bull, Battelle NW Labs
 DFO: Tom Miller

MAY

May 6-8 IRP: Human Health #6 IRP/HEHS DC
 Co-Chairs: Dr. Joan Daisey, Lawrence-Berkeley Labs
 Dr. Bernard Weiss, Univ of Rochester
 DFO: Sam Rondberg

May 13-15 Sediment-related issues EPEC DC
 Chair: Dr. Mark Harwell, University of Miami
 DFO: Stephanie Sanzone

[May 15] CAAA Section 812: Retrospective Study Council [Tele]
 Chair: Dr. Maureen Cropper, World Bank
 DFO: Jack Kooyoomjian

[May 16] CAAA Section 812: Retro/Prospective Council [Tele]
 Study as needed
 Chair: Dr. Maureen Cropper, World Bank
 DFO: Jack Kooyoomjian

May 29-30 Scientific and Technological Achievement EC/Sub DC
Award Recommendations

Chair: Dr. William Glaze, Univ. of North Carolina

DFO: Bob Flaak

NOTE: Due to the personnel-related issues that are
discussed, this meeting has is closed to the
public.

May TBA SAB and SDWA of 1996 DWC DC

DWC Chair: Dr. Richard Bull, Battelle NW Labs

DFO: Tom Miller

May TBA CO Development Plan & Diesel Emissions CASAC RTP
Health Assessment

*Chair: Dr. Joe Mauderly, Lovelace Respiratory
Research Institute*

DFO: Bob Flaak

[May TBA] Review of Environmental Goals report EC DC

Chair: Dr. Genevieve Matanoski, Johns Hopkins Univ

DFO: Don Barnes

Glossary of acronyms for the uninitiated

CASAC = Clean Air Scientific Advisory Committee

COUNCIL = Council on Clean Air Compliance Analysis
(previously referred to as the Clean Air Act
Compliance Analysis Council (CAACAC))

DC = Washington, DC

DFO = Designated Federal Official (SAB Staff lead)

DWC = Drinking Water Committee

EC = Executive Committee

EEAC = Environmental Economics Advisory Committee

EEC = Environmental Engineering Committee

EHC = Environmental Health Committee

EPEC = Ecological Processes and Effects Committee

IHEC = Integrated Human Exposure Committee (formerly,
Indoor Air Quality/Total Human Exposure
Committee: IAQC)

IRP = Integrated Risk Project

EAS = Economics Analysis Subcommittee

ERS = Ecological Risk Subcommittee

HEHS = Human Exposure and Health Subcommittee

RROS = Risk Reduction Options Subcommittee

SC = Steering Committee

VS = Valuation Subcommittee

RAC = Radiation Advisory Committee

RSAC = Research Strategies Advisory Committee
RTP = Research Triangle Park, NC
SAP = Scientific Advisory Panel (FIFRA)
TBA = To Be Announced
[Tele] = Publicly accessible telephone conference call

3. PIPELINE REPORT OF SAB REPORTS IN PROGRESS

a. TRANSMITTED TO THE ADMINISTRATOR IN MARCH

- 1) Evaluation of Research Needs for the Particulate Matter National Ambient Air Quality Standards (NAAQS)
EPA-SAB-CASAC-LTR-97-004
- 2) Science Advisory Board Review of the Office of Research and Development's (ORD) Draft Exposure Factors Handbook
EPA-SAB-IHEC-LTR-97-005

b. APPROVED BY EC & AWAITING FINAL EDITS AND APPROVAL BY VETTORs

Report on Marsh Management EPEC

c. SCHEDULED FOR APRIL 24-25, 1997 EC MEETING

- 1) Report on the Review of the Superfund Innovative Technologies Evaluation (SITE) Program EEC
 - 2) Review of the Neurotoxicity Guidelines EHC
 - 3) Advisory on Watershed EcoRisk Case studies* EPEC
 - 4) Report on Lakes Biocriteria EPEC
- (* = uncertain at press time)

d. SCHEDULED FOR LATER EC MEETINGS

- 1) Review of the Agency's Risk Assessment of Mercury EC/Sub
- 2) Review of the Technical Aspects of the Agency's Environmental Goals Project EC/Sub
- 3) Advisory on the Review of the Statistical Protocol for the Microbiological Survey of Drinking Water DWC
- 4) Report on National Risk Management Research Lab EEC
- 5) Review of the Cancer Risk Assessment Guidelines EHC

e. SAB REPORTS THAT DO NOT REQUIRE EC APPROVAL (CASAC & COUNCIL) THAT ARE ALSO UNDER DEVELOPMENT

- 1) Report on Section 812 Retrospective Study COUNCIL
--COMMITTEE DRAFT IN PREPARATION

4. COMMITTEE ACTIVITIES IN MARCH

SAB Committees conducted SEVEN meetings in March:

Note: 6 of the 7 meetings were conducted by publicly accessible conference calls, thereby saving wear-and-tear on SAB Members and Consultants, SAB Staff, and the public(!).

a. IRP: Steering Committee (#4)

Chair: Dr. Gene Matanoski (Johns Hopkins University)

DFO: Stephanie Sanzone

On March 10, the Steering Committee conducted a publicly accessible conference call in order to receive an update on the progress of the Subcommittees, adjust the schedule for completion of the project, and decide on the procedures for having the final report peer review.

b. Council on Clean Air Act Compliance Analysis--Four meetings

Chair: Dr. Maureen Cropper, World Bank

DFO: Jack Kooyoomjian

On March 14, 19, and 26 the Council conducted a series of publicly accessible conference calls to review the Agency's progress in a) completing the CAAA Section 812 Retrospective Study and b) initiating the CAAA Section 812 Prospective Study. The Council found much to applaud, while raising questions about some aspects of the treatment of ecological risks and the value human life.

c. Executive Committee

On March 17 the Executive Committee met to act on the IHEC's report on the Agency's Exposure Factors Handbook. The EC approved the report, subject to final approval by EC member Dr. Granger Morgan, who wants to make sure that the discussions of uncertainty and variability in the SAB report and the Agency document are appropriate.

In addition, the EC developed a schedule for its review of the Environmental Goals Project. The SAB's input should be available in early May.

d. IRP: Human Exposure & Health Subcommittee (#5)

Co-Chair: Dr. Joan Daisey, Lawrence Berkeley Labs

Dr. Bernard Weiss, Rochester University

DFO: Sam Rondberg/Don Barnes

On March 26-28, the Subcommittee met to review its progress in developing a method for ranking risks to human health. The process introduces an innovative approach that uses the Internet as a means of tapping the

combined knowledge and judgments of a wide range of technical experts.

e. **IRP: Ecological Risk Subcommittee (#7)**

Chair: Dr. Mark Harwell, University of Miami

DFO: Stephanie Sanzone

On March 31 the Subcommittee held a publicly accessible conference call to polish further its analysis of ecological stressors.

5. **FEATURETTES**

a. SAB and the G-7

Dr. Gene Matanoski will be the technical expert on the US delegation to the G-7's Environmental Futures Forum on April 4-5. The goal of the meeting is to stimulate new ways of thinking about environmental problems of the future on the international scale, just as the SAB's Beyond the Horizon report attempted to do on a more domestic scale. As a member of the Steering Committee planning the meeting Dr. Matanoski's expertise and experience has been quite helpful in framing the meeting. A thousand additional copies of the SAB's report and its Technical Annex have been printed to meet the growing demand for this 1995 report.

Ms. Anne Barton and Dr. Don Barnes of the SAB Staff Office have been active in preparing for the meeting and will provide assistance throughout the event.

b. SAB and the Internet

1) SAB Website within the EPA Home Page

You are invited to visit the SAB Website at URL:
<http://www.epa.gov/sciencel/>

The site offers such features as

- a) Full-text reports for FY95-FY97
- b) Background information about the structure, function, and membership of the SAB
- c) A rolling two-month calendar of SAB meetings
- d) The most current issue of HAPPENINGS
- e) Items of current interest; e.g.,
 - i. The CASAC reports on ozone and particulate matter
 - ii. Dr. Mark Harwell's March 11 testimony on the SAB to the Subcommittee on Energy and the Environment of the House Science Committee

2) SAB Listserver

By subscribing to the free SAB Listserver, you will automatically receive copies of all Federal Register notices announcing SAB meetings, together with brief descriptions of the

topics to be covered at the meetings. These notices will be emailed to you within 24-hours of their publication in the Federal Register.

To subscribe, simply send the following message, inserting your names,

Subscribe epa-sab FIRSTNAME LASTNAME
to
listserv@unixmail.rtpnc.epa.gov

6. ABSTRACTS OF NEW REPORTS

- a. Evaluation of Research Needs for the Particulate Matter National Ambient Air Quality Standards (NAAQS)
EPA-SAB-CASAC-LTR-97-004

ABSTRACT

On November 18 and 19, 1996, the Clean Air Scientific Advisory Committee (CASAC) reviewed two draft EPA documents, *Particulate Matter Research Needs for Human Health Risk Assessment*, and *Particulate Matter Research Program Strategy*. The Committee commended EPA for developing these important documents, and noted that the review drafts represent significant steps toward setting the stage for the research that is critical to resolving present uncertainties about the health impacts of particulate matter (PM). In its review, the Committee evaluated the research priorities and offered comments and suggestions to improve each document.

In reviewing the drafts, the Committee noted that epidemiological research on links between long-term exposure to PM and life shortening and other long-term health effects, and laboratory and clinical research exploring potential mechanisms of response to PM were among the highest priorities. Research providing a better understanding of personal exposure, and especially of individuals thought to be most susceptible, was also of high priority.

The Committee found the Research Needs Document to be an encyclopedic compilation of PM research topics, but noted that it lacks sufficient focus to present a clear view of the most important research needs. The document's utility suffers from its failure to clearly place PM research needs in the context of the present large uncertainties in assessing the health risks from inhaled PM, and thus in setting the form and level of PM NAAQS. The Strategy Document is presented as a statement of EPA strategy for PM research, but it falls short of defining and defending a strategic action plan. Like the Research Needs Document, this draft does not provide an adequate risk assessment framework for identifying and prioritizing research and for allocating resources to the effort.

The Committee was unanimous in expressing its strong concern that the level of funding and staffing presented falls far short of the resources needed to make progress commensurate with the health and economic implications of estimated PM effects and costs of controls.

b. Science Advisory Board Review of the Office of Research and Development's (ORD) Draft Exposure Factors Handbook
EPA-SAB-IHEC-LTR-97-005

The SAB's Integrated Human Exposure Committee met on December 19-20, 1996 in Arlington, VA to review the draft Exposure Factors Handbook. The Committee focused on the Handbook's consistency with the EPA Exposure Guidelines; the usefulness of its data presentation; the groupings of background studies into "Key" and "Relevant" categories; and the degree to which the Handbook's recommendations reflected the proper interpretation of the data and the appropriate characterization of the data's limitations and uncertainties.

The Committee found that the revised edition of the Exposure Factors Handbook has been substantially expanded and that it provides a great deal of useful data. The Committee commended the Agency on its efforts. The Committee noted, however, that the Handbook must be made more consistent with the Exposure Assessment Guidelines with respect to the definitions and usage of the terms "exposure" and "dose."

The Committee found that the Handbook's data are generally presented in a way useful to exposure analysts, but recommended that the Handbook be edited to achieve consistency in the summary statistics. The Committee also found that the groupings of background studies into "Key" and "Relevant" categories were, in most cases, done appropriately. The Committee identified some problems re the proper interpretation of the data and characterization of the presented data's limitations and uncertainties. The Committee recommends that the Chapter on variability and uncertainty be revised to emphasize variability, which is clearly related to the distributional nature of the data presented in the Handbook.

Finally, the Committee found that some of the tables on food intake (meat products in particular) were not as up-to-date as they should (and could) be, and urges the Agency to obtain more current data available from the department of Agriculture and revise the relevant sections of the Handbook as quickly as possible.

7. MEMBERS AND STAFF NEWS

Drs. George Wolff, Morton Lippmann, and Joe Mauderly testified before the Energy and Environment Subcommittee of the House Science Committee on the CASAC reports on particulate matter and ozone.

Dr. Mark Harwell testified before the Energy and Environment Subcommittee of the House Science Committee on the Science Advisory Board.

Dr. Donald Barnes has been appointed to Membership on the Advisory Council of the Society for Risk Analysis.

Dr. Jack Fowle presented a paper on "risk and decision making" at the recent national meeting of the Society of Toxicology.

8. BON MOT

Word origins:

Unicellular: A term derived from an early Latin prefix and a current high-tech term, meaning "one mobile phone"; as in "Ours is a unicellular household."

Canaveral: An ancient Greek term meaning "launch pad", as in "Cape Canaveral."